

Serial No. 09/341,101
Docket No. SPF 0002 PA/41105.6/A1359
Reply to Office Action of April 20, 2004

Remarks

Claims 1-31 are currently pending. Claims 1-12, 14-16, 18, 19, 21-25, 27, 28, 30 and 31 were rejected in the Final Office Action of April 20, 2004. Claims 1 and 14 have been amended.

Statement of the Substance of the Interview

On April 26, 2004, Kristina E. Swanson, on behalf of the Applicants conducted a telephone interview with Examiner Olga Hernandez. In the Office Action made Final, claims 1-12, 14-16, 18, 19, 21-25, 27, 28, 30 and 31 were rejected. The Applicants sought to clarify the basis of the rejection and as such, Ms. Swanson and the Examiner briefly discussed the above claims during the interview. The Examiner stated that the claims as written did not overcome the prior art. The Examiner suggested amending the claims to distinguish them from the prior art. The Examiner further indicated that her search would have to be updated in view of any amendments to the claims.

Claim Rejections

Independent claims 1 and 14, as amended, teach a system for determining the position of a working part of a tool on a machine. The system has an apparatus on the machine to determine the position and orientation of the machine according to a fixed coordinate system. The system also includes another device on the working part of the machine to determine the position of the working part relative to the position of the machine. A third device located on the machine itself is used to calculate the position and orientation and inclination of the working part of the machine based on the position and orientation of the machine in the fixed coordinate system as well as the positional relationship between the working part and the machine as a whole.

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None of the cited prior art references teach or suggest all of the limitations of the claimed invention. For example, Gudat fails to disclose using inclination as a factor in determining position and orientation of the working part of the tool. Instead, Gudat defines orientation as the position of the machine on a two-dimensional site map as well as its elevation on the topography map (Page 7, lines 8-15). Gudat makes no mention of determining the inclination of the working part of the tool. Consequently, Applicants assert that not all of the elements of claims 1 and 14 are shown or suggested by the cited prior art references. Therefore, the Applicants believe the rejections are unsupported by the cited references and request that the Examiner withdraw her rejections to these claims.

Claims 2-12, 15, 16, 18, 19, 21-25, 27, 28, 30 and 31 dependent on independent claims 1 and 14 either directly or ultimately. These dependent claims are patentable for the same reasons as presented above with respect to the claims from which they depend. Further, the dependent claims also include additional limitations, which distinguish them from the prior art. Consequently, Applicants assert that not all of the elements of claims 2-12, 15, 16, 18, 19, 21-25, 27, 28, 30 and 31 are shown or suggested by the cited prior art references. Therefore, the Applicants believe the rejections also are unsupported by the cited references and request that the Examiner withdraw her rejections to these claims.

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Conclusion

For the above reasons, the Applicant respectfully submits that the above claims represent allowable subject matter. The Examiner is encouraged to contact the undersigned to resolve efficiently any formal matters or to discuss any aspects of the application or of this response. Otherwise, early notification of allowable subject matter is respectfully solicited.

Respectfully submitted,
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